

## Approach taken by oceanography specialists toward building emergency system and analyzing radiocesium in bottom sediment

IKEDA, Motoyoshi<sup>1\*</sup>

<sup>1</sup>Hokkaido University

Eastern Japan along the Pacific coast has been damaged seriously and is still trying to recover after the nuclear power plant accident in Fukushima due to the magnitude-9 earthquake on March 11, 2011. In addition, we should prepare ourselves for another accident in future. The necessary system is to predict and monitor radionuclide distributions immediately following a possible accident, even if it is a rare case. We have started a plan of testing an emergency system based on ocean simulation models. The other actions include monitoring and modeling of radiocesium concentration, which still keeps a high level in the bottom sediments. The dedicated members of the Oceanographic Society of Japan have been making estimations and discussion to find which processes are responsible for the high concentration, while symposia have been held from time to time. We have so far reached the tentative conclusion that any process could be a possible one for the present condition among absorption/adsorption by plankton, detritus and disturbed sediments, direct adsorption of seawater cesium and inflow of suspended solids from rivers, with a particular attention to re-suspending sediments.

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